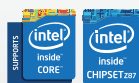
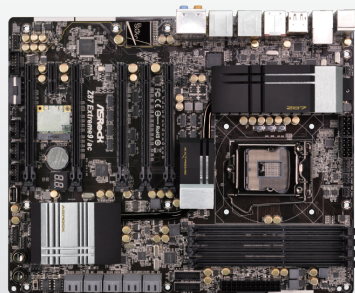


# Z87 EXTREME9/ac

Intel® Z87 Chipset

ASROCK



## Product Brief

- A-Style : Home Cloud, Purity Sound™, 802.11ac Wi-Fi
- Supports 4-Channel, Dual-Port Thunderbolt™ Technology
- Supports 4th Gen Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® in LGA1150 Package
- Premium Gold Capacitor Design, Digi Power, 12 Power Phase Design, Dual-Stack MOSFET
- Supports Dual Channel DDR3 2933+(OC)
- 5 x PCIe 3.0 x16, 1 x PCIe 2.0 x1, 1 x mini-PCIe
- AMD 4-Way CrossFireX™ and NVIDIA 4-Way SLI™ supported by PLX PEX 8747 Bridge
- Rear VGA I/O: 1\*HDMI, 2\*Thunderbolt, 1\*DisplayPort Input (for test only)
- Intel Dual Gigabit LAN with Teaming
- 7.1 CH HD Audio with Content Protection (Realtek ALC1150 Audio Codec), Supports DTS Connect
- 10 x SATA3, 1 x eSATA, 12 x USB 3.0, 9 x USB 2.0
- 1 x ASRock Wi-SD BOX
- WLAN : 1 x 802.11ac + BT v4.0 module, 1 x ASRock 2.4/5GHz WiFi Antenna
- Supports A-Tuning, XFast 555, Easy Driver Installer, FAN-Tastic Tuning, USB Key



## Detail Specification

Platform	<ul style="list-style-type: none"> <li>- ATX Form Factor</li> <li>- Premium Gold Capacitor design (100% Japan-made high-quality Conductive Polymer Capacitors)</li> <li>- Multiple Filter Cap (MFC) (Filter different noise by 3 different capacitors: DIP solid cap, POSCAP and MLCC)</li> </ul>	Storage	<ul style="list-style-type: none"> <li>- 6 x SATA3 6.0 Gb/s connectors by Intel® Z87, support RAID (RAID 0, RAID 1, RAID 5, RAID 10, Intel Rapid Storage Technology 12 and Intel Smart Response Technology), NCQ, AHCI and Hot Plug</li> <li>- 4 x SATA3 6.0 Gb/s connectors by ASMedia ASM1061, support NCQ, AHCI and Hot Plug (SATA3_A4 connector is shared with the eSATA port)</li> <li>- 1 x eSATA connector by ASMedia ASM1061, supports NCQ, AHCI, Hot Plug and Port Multiplier</li> </ul>
A-Style	<ul style="list-style-type: none"> <li>- Home Cloud</li> <li>- Purity Sound™</li> <li>- 802.11ac WiFi</li> </ul>	Connector	<ul style="list-style-type: none"> <li>- 1 x IR header</li> <li>- 1 x COM port header</li> <li>- 1 x Power LED header</li> <li>- 2 x CPU Fan connectors (1 x 4-pin, 1 x 3-pin)</li> <li>- 3 x Chassis Fan connectors (1 x 4-pin, 2 x 3-pin)</li> <li>- 1 x Power Fan connector (3-pin)</li> <li>- 1 x 24 pin ATX power connector</li> <li>- 2 x 8 pin 12V power connectors (Hi-Density Power Connectors)</li> <li>- 1 x SLIXFire power connector</li> <li>- 1 x Front panel audio connector</li> <li>- 3 x USB 2.0 headers (support 6 USB 2.0 ports)</li> <li>- 1 x Vertical Type A USB 2.0</li> <li>- 2 x USB 3.0 headers (support 6 USB 3.0 ports)</li> <li>- Wi-SD Box installation is required to support 6 USB3.0 ports.</li> <li>- 1 x Dr. Debug with LED</li> <li>- 1 x Power Switch with LED</li> <li>- 1 x Reset Switch with LED</li> <li>- 1 x BIOS Selection Switch</li> </ul>
CPU	<ul style="list-style-type: none"> <li>- Supports 4th Generation Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® in LGA1150 Package</li> <li>- Digi Power Design</li> <li>- 12 Power Phase Design</li> <li>- Dual-Stack MOSFET (DSM)</li> <li>- Supports Intel® Turbo Boost 2.0 Technology</li> <li>- Supports Intel® K-Series unlocked CPU</li> <li>- Supports ASRock BCLK Full-range Overclocking</li> </ul>	BIOS Feature	<ul style="list-style-type: none"> <li>- 2 x 64Mb AMI UEFI Legal BIOS with Multilingual GUI support (1 x Main BIOS and 1 x Backup BIOS)</li> <li>- Supports Secure Backup UEFI Technology</li> <li>- ACPI 1.1 Compliance Wake Up Events</li> <li>- SMBIOS 2.3.1 Support</li> <li>- CPU, DRAM, PCH 1.05V, PCH 1.5V Voltage Multi-adjustment</li> </ul>
Chipset	- Intel® Z87	Support CD	<ul style="list-style-type: none"> <li>- Drivers, Utilities, AntiVirus Software (Trial Version), CyberLink MediaEspresso 6.5 Trial, Google Chrome Browser and Toolbar, Start8, MeshCentral, Splashtop Streamer</li> </ul>
Memory	<ul style="list-style-type: none"> <li>- Dual Channel DDR3 memory technology</li> <li>- 4 x DDR3 DIMM slots</li> <li>- Supports DDR3 2933+(OC)/2800(OC)/2400(OC)/2133(OC)/1866(OC)/1600/1333/1066 non-ECC, un-buffered memory</li> <li>- Max. capacity of system memory: 32GB</li> <li>- Supports Intel® Extreme Memory Profile (XMP) 1.3 / 1.2</li> <li>- Distortion-Free Slot</li> </ul>	Unique Feature	<ul style="list-style-type: none"> <li>- ASRock A-Tuning</li> <li>- ASRock Instant Flash</li> <li>- ASRock APP Charger</li> <li>- ASRock XFast USB</li> <li>- ASRock XFast LAN</li> <li>- ASRock XFast RAM</li> <li>- ASRock Crashless BIOS</li> <li>- ASRock OMG (Online Management Guard)</li> <li>- ASRock Internet Flash</li> <li>- ASRock UEFI System Browser</li> <li>- ASRock UEFI Tech Service</li> <li>- ASRock Dehumidifier Function</li> <li>- ASRock Easy RAID Installer</li> <li>- ASRock Easy Driver Installer</li> <li>- ASRock Interactive UEFI</li> <li>- ASRock Fast Boot</li> <li>- ASRock Restart to UEFI</li> <li>- ASRock USB Key</li> <li>- ASRock FAN-Tastic Tuning</li> <li>- Hybrid Booster <ul style="list-style-type: none"> <li>- CPU Frequency Steppless Control</li> <li>- ASRock U-COP</li> <li>- Boot Failure Guard (B.F.G.)</li> </ul> </li> <li>- Good Night LED</li> </ul>
Expansion Slot	<ul style="list-style-type: none"> <li>- 5 x PCI Express 3.0 x16 slots (PCI-E1/PCI-E2/PCI-E3/PCI-E4/PCI-E5: single at x16 (PCI-E2); dual at x16 (PCI-E1) / x16 (PCI-E4); triple at x8 (PCI-E1) / x8 (PCI-E3) / x16 (PCI-E4); quad at x8 (PCI-E1) / x8 (PCI-E3) / x8 (PCI-E4) / x8 (PCI-E5))</li> <li>- *PCI-E1, PCI-E3, PCI-E5 and PCI-E7 slots will be disabled if PCI-E2 slot is occupied.</li> <li>- 1 x PCI Express 2.0 x1 slot</li> <li>- 1 x mini-PCI Express slot: For WiFi + BT module</li> <li>- PLX PEX 8747 and PLX PEX 8808 embedded</li> <li>- Supports AMD Quad CrossFireX™, 4-Way CrossFireX™, 3-Way CrossFireX™ and CrossFireX™</li> <li>- Supports NVIDIA® Quad SLI™, 4-Way SLI™, 3-Way SLI™ and SLI™</li> </ul>	Hardware Monitor	<ul style="list-style-type: none"> <li>- CPU/Chassis Temperature Sensing</li> <li>- CPU/Chassis/Power Fan Tachometer</li> <li>- CPU/Chassis Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature)</li> <li>- CPU/Chassis Fan Multi-Speed Control</li> <li>- Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore</li> </ul>
Graphics	<ul style="list-style-type: none"> <li>- *Intel® HD Graphics Built-in Visuals and the VGA outputs can be supported only with processors which are GPU integrated.</li> <li>- Supports Intel® HD Graphics Built-in Visuals : Intel® Quick Sync Video with AVC, MVC (S3D) and MPEG-2 Full HW Encode1, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 4400/4600</li> <li>- Pixel Shader 5.0, DirectX 11.1</li> <li>- Max. shared memory 1792MB</li> <li>- Two VGA Output options: HDMI and DisplayPort/Thunderbolt ports</li> <li>- Supports Triple Monitors</li> <li>- Supports HDMI Technology with max. resolution up to 4K x 2K (4096x2304) @ 24Hz</li> <li>- Supports DisplayPort/Thunderbolt with max. resolution up to 4K x 2K (4096x2304) @ 24Hz</li> <li>- Supports Auto Lip Sync, Deep Color (12bpc), xvYCC and HBR (High Bit Rate Audio) with HDMI (Compliant HDMI monitor is required)</li> <li>- Supports HDCP function with HDMI and DisplayPort/Thunderbolt ports</li> <li>- Supports Full HD 1080p Blu-ray (BD) playback with HDMI and DisplayPort/Thunderbolt ports</li> <li>- Supports data transfer rate up to 10Gbps with Thunderbolt port</li> <li>- Supports Daisy-chain up to 6 Thunderbolt devices</li> </ul>	OS	- Microsoft® Windows® 8 / 8.64-bit / 7 / 7.64-bit compliant
Audio	<ul style="list-style-type: none"> <li>- 7.1 CH HD Audio with Content Protection (Realtek ALC1150 Audio Codec)</li> <li>- Premium Blu-ray audio support</li> <li>- Supports Purity Sound™ <ul style="list-style-type: none"> <li>- 115dB SNR DAC with differential amplifier</li> <li>- THX NE5532 Premium Headset Amplifier (supports up to 600 Ohms headsets)</li> <li>- Direct Drive Technology</li> <li>- EMI shielding cover</li> <li>- PCB isolate shielding</li> </ul> </li> <li>- Supports DTS Connect</li> </ul>	Certifications	<ul style="list-style-type: none"> <li>- FCC, CE, WHQL</li> <li>- ErP/EuP Ready (ErP/EuP ready power supply is required)</li> </ul>
LAN	<ul style="list-style-type: none"> <li>- Gigabit LAN 10/100/1000 Mb/s</li> <li>- 1 x Giga PHY Intel® I217V, 1 x GigaLAN Intel® I211AT</li> <li>- Supports Intel® Remote Wake Technology (on Intel® I217V)</li> <li>- Supports Wake-On-LAN</li> <li>- Supports Dual LAN with Teaming</li> <li>- Supports Energy Efficient Ethernet 802.3az</li> <li>- Supports PXE</li> </ul>	Accessories	<ul style="list-style-type: none"> <li>- 2 x ASRock SLI Bridge Cards</li> <li>- 1 x ASRock SLI Bridge SS Card</li> <li>- 1 x ASRock 3-Way SLI Bridge Card</li> <li>- Quick Installation Guide, Support CD, I/O Shield</li> <li>- 10 x SATA Data Cables</li> <li>- 2 x SATA 1 to 1 Power Cables</li> <li>- 1 x ASRock Wi-SD Box</li> <li>- 12 x Screws (for Wi-SD Box)</li> <li>- 1 x USB 3.0 Cable</li> </ul>
Wireless LAN	<ul style="list-style-type: none"> <li>- Supports IEEE 802.11a/b/g/n/ac</li> <li>- Supports Dual-Band (2.4/5 GHz)</li> <li>- Supports High speed wireless connection up to 867Mbps</li> <li>- 2 antennas to support 2 (Transmit) x 2 (Receive) diversity technology</li> <li>- Supports Bluetooth 4.0 / 3.0 + High speed class II</li> </ul>		
Rear Panel I/O	<ul style="list-style-type: none"> <li>- I/O Panel</li> <li>- 1 x PS/2 Mouse/Keyboard Port</li> <li>- 1 x HDMI Port</li> <li>- 1 x DisplayPort Input for Thunderbolt port (TBT1 for test only)</li> <li>- 2 x Thunderbolt Ports (support Thunderbolt devices or DisplayPort Monitors)</li> <li>- 1 x Optical S/PDIF Out Port</li> <li>- 1 x eSATA Connector</li> <li>- 2 x USB 2.0 Ports</li> <li>- 2 x USB 3.0 Ports (Intel® Z87)</li> <li>- 4 x USB 3.0 Ports (ASMedia Hub)</li> <li>- 2 x RJ-45 LAN Ports with LED (ACT/LINK LED and SPEED LED)</li> <li>- 1 x Clear CMOS Switch</li> <li>- HD Audio Jack: Rear Speaker / Central / Bass / Line in / Front Speaker / Microphone</li> </ul>		

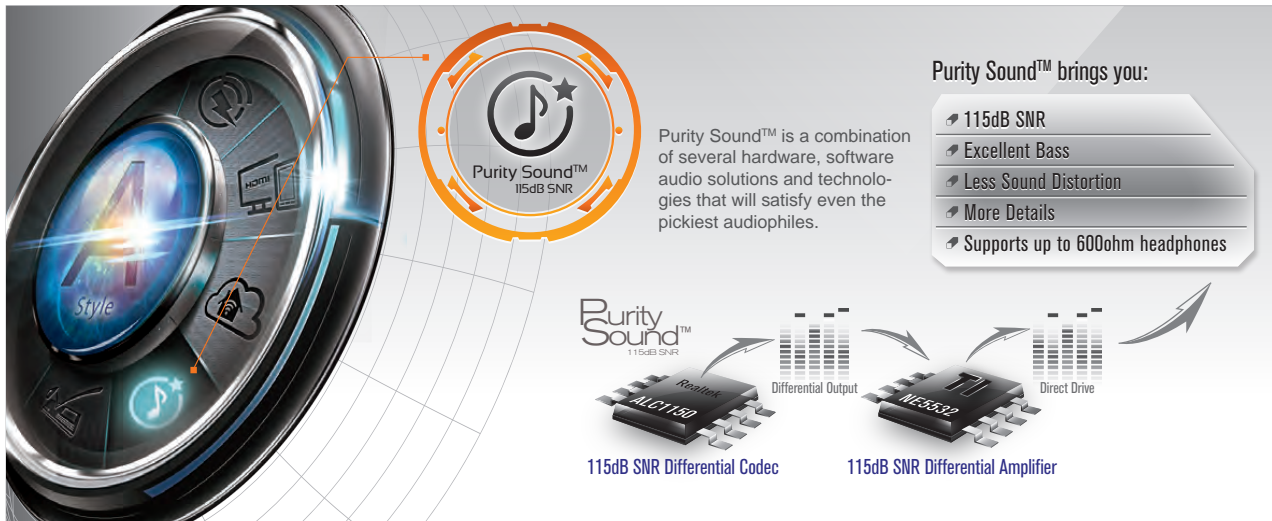
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Fragen zu dem Produkt? Kein Problem - wir helfen Ihnen per eMail ([info@diskontcomputer.com](mailto:info@diskontcomputer.com)) gerne weiter!  
Den aktuellen Preis und Lagerstand finden Sie online auf <http://www.diskontcomputer.com/detail.php?item=760772>

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**ASROCK**



**Purity Sound™** brings you:

- 115dB SNR
- Excellent Bass
- Less Sound Distortion
- More Details
- Supports up to 600ohm headphones

Purity Sound™ is a combination of several hardware, software audio solutions and technologies that will satisfy even the pickiest audiophiles.

**115dB SNR Differential Codec** (Realtek ALC1150) → **115dB SNR Differential Amplifier** (NE5532)

Diagram showing the audio path: Purity Sound™ 115dB SNR → Differential Output → NE5532 → Direct Drive.



This motherboard comes with an exclusive 802.11ac WiFi (5G WiFi) module that supports up to 867Mbps wireless networks and Bluetooth v4.0.

**2T2R Dual Band WiFi 802.11ac + BT v4.0 Support**

Diagram showing the WiFi module and speed comparison:

Module	Speed (Mbps)
2T2R 802.11ac	867
2T2R 802.11n	300

**289% Speed Boost!**



**Intel® Ethernet**

This motherboard supports remote wake with the onboard Intel LAN, so you can connect with your PC from anywhere in the world. You will be able to power your PC on or turn it off, monitor and take control of it remotely with another smartphone, tablet or computer.

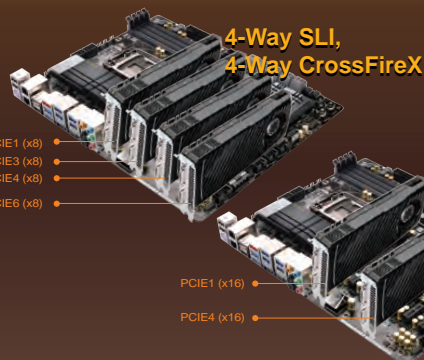
**Home Cloud**

Diagram showing a PC in sleep mode (Zzz) being woken up by a smartphone, tablet, or laptop connected to the Home Cloud network.

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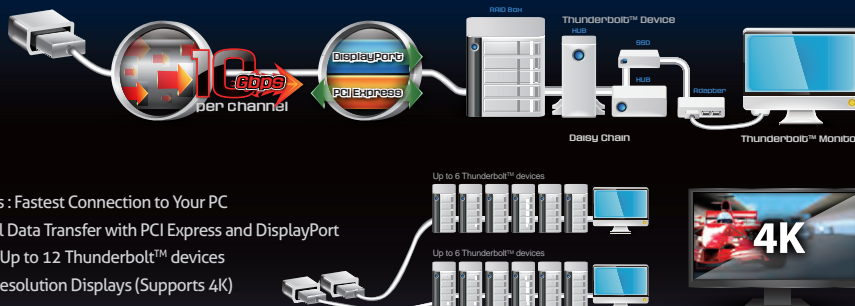
2-Way SLI,  
CrossFireX

### 4-Way SLI & CrossFireX Supported by PLX PEX 8747 Bridge

PLX PEX 8747 is a PCIe Gen3 bridge chip that offers solid PCIe 3.0 lanes for PCIe devices and is optimized to support high performance graphics. With the bridge onboard, this motherboard is able to support up to four VGA cards with 4-Way SLI or 4-Way CrossFireX at PCI-E Gen3 x8/x8/x8/x8 mode.



ASRock Z87 Extrem9/ac has two Thunderbolt™ connectors supporting 4-Channel technology, bringing blistering fast data transfers ever.



- Up to 10Gbps : Fastest Connection to Your PC
- Bi-Directional Data Transfer with PCI Express and DisplayPort
- Daisy Chain : Up to 12 Thunderbolt™ devices
- Large, High-Resolution Displays (Supports 4K)



Premium Gold Caps are 100% made in Japan; these solid capacitors are sleek, high gloss caps with a premium gold coating representing long life and stable performance.



By adopting digital Pulse-width modulation (PWM), the ASRock motherboard can provide CPU Vcore voltage more efficiently and smoothly.



With the combined power of three kinds of capacitors, MFC allows users to overclock their PC rig to extreme levels without worrying about the hardware components.



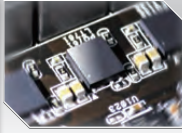
Designed with a 12 Power Phase Design, this motherboard features sturdy components and completely smooth power delivery to the CPU. Plus, it offers unmatched overclocking capabilities and enhanced performance with the lowest temperature for advanced gamers as well.



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By stacking two dies into one MOSFET, DSM provides larger die area and lower Rds(on), so the power supply for the CPU Vcore is more efficient.



The two Intel LAN ports and Teaming function on this motherboard allows two single connections to act as one single connection for twice the transmission bandwidth.



A-Tuning is ASRock's multi purpose software suite with a new interface, more new features and improved utilities, including XFast RAM, OC Tweaker and a whole lot more.



4K is a new standard for display resolutions with a minimum of 3840 x 2160 pixels, which is twice the horizontal and vertical resolution of the 1080p format and four times as many pixels overall.



This free bundled front tray includes 4 USB 3.0 ports and an SD 3.0 card slot.



DTS Connect is a blanket name for a two-part system, including DTS Interactive and DTS Neo:PC, it is used on the computer platform only, in order to convert PC audio into the DTS format.



ASRock's unique XFast 555 technology (XFast RAM, XFast LAN and XFast USB) allows users to experience 5 times performance boost in terms of system performance, LAN speed and USB transfer speed.



This motherboard supports Triple-Monitor. You may choose up to three display interfaces to connect monitors and use them simultaneously.



Configure different fan speeds for respective temperatures using the graph. The fans will automatically shift to the next speed level when the assigned temperature is met.



For users that don't have an optical disk drive to install the drivers from our support CD, Easy Driver Installer is a handy tool in the UEFI that installs the LAN driver to your system via an USB storage device, then downloads and installs the other required drivers automatically.



ASRock's new pin design for the memory slots that effectively reduces distortion and promotes performance.



The UEFI system browser allows you to easily check your current system configuration in UEFI setup.



Just plug in the USB Key and let your computer log in to windows automatically without having to type your username and password!



Contact ASRock Tech Service by sending a support request form from the UEFI setup utility if you are having trouble with your PC.



Users may prevent motherboard damages due to dampness by enabling "Dehumidifier Function". When enabling Dehumidifier Function, the computer will power on automatically to dehumidify the system after entering S4/S5 state.



ASRock OMG technology allows you to establish an internet curfew or restrict internet access at specified times. Administrators are able to schedule the starting and ending hours of internet access granted to other users.